Bugs, pundits, evolution, and the New Year

The New Year prompts us to think about where we are going and where we have come from. Our thoughts of the future of medicine in the United States are dominated by rancorous debates about health care delivery and alternative payment schemes. Some dialogues are between serious students of health care systems, but the most audible are between self-declared pundits, many with limited practical knowledge of the physician’s perspective, doctor-patient relationships, or the complicated and cascading ways that federally funded medical education directly affects health care. Discussions about the future of medicine, even among physicians, are often filled with sound bites rather than citation of solid data.

The article on soft-tissue infections in this issue of the Journal by Dr. Sabitha Rajan (page 57) made me reflect on the relentless march of biology. Pathogens continue to evolve, influenced by human behavior but untouched by self-promoting and partisan dialogue and undaunted by doubting politicians. Several years ago, we could assume that most skin pathogens would readily be controlled by normal body defenses, a few requiring cephalosporin therapy and even fewer needing surgical intervention. But now, environmental pressures, including the zealous use of antibiotics, have altered the microbiology of skin infections. This requires new choices for empiric antibiotic therapy of these infections. With more than just altered susceptibility profiles, these bugs exhibit biologic behaviors distinct from their historic predecessors. The “spider bite” lesion of MRSA and the scarily rapid advance of certain streptococcal infections across tissue planes mandate prompt recognition by astute clinicians—the physical examination still matters.

The brisk evolutionary pace of this new range of infections stokes the urgent need to rapidly develop novel antibiotics, a process caught smack in the middle of our pundits’ political debates. Will the development of drugs for uncommon but serious infections be underwritten by the government, or will companies be required to bear the full expense of developing drugs under the scrutiny of the FDA? Will they then be pressed to price them “affordably” or price them to recoup estimated development costs, only to have payors list them as “third-tier” on the formulary, thus making them unaffordable to many patients? Our ability to medically confront this evolution will be directly affected by the outcome of the current political debate. Will all patients be able to easily access medical care so that early significant infections are recognized for what they are, and will the new antibiotics required for appropriate treatment be affordable? This year is going to be an interesting one.

So, as empiric therapy with cephalaxin changes to clindamycin and 2011 rolls into 2012, I and our editorial staff offer our sincere wishes for a healthy, happy, and especially a peaceful New Year.